

EXAMINER'S AMENDMENT AND NOTICE OF ALLOWABILITY

[1] The following examiner's amendment is in response to the telephone interview on 10/13/2008 and the claim amendment received on 10/14/2008.

[2] An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bill Esser (Reg. No. 38,053) on 9/14/2008.

AMENDMENT(S) TO THE CLAIMS

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Currently Amended) A method of classifying an image, the method comprising:
obtaining an image;

Art Unit: 2624

determining one or more classification thresholds;

determining a concentration ratio for the image;

comparing the concentration ratio to at least one of the one or more classification thresholds;

and

classifying, using a processor, the image based on the comparison of the concentration ratio to at least one of the one or more classification thresholds, wherein determining the concentration ratio for the image includes determining the concentration ratio according to the following

$$CR = \left(\sum_L P_L \right)^n / \left(\sum_L P_L^n \right)$$

where CR is a concentration ratio, n is greater than 1, and P_L is a population at a level L .

12. (Previously presented) A method as claimed in claim 11 wherein n is an even integer.

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Currently Amended) A computer readable medium having stored thereon instructions executable by an image classifying processor, the processor configured to obtain an image, obtain one or more classification thresholds, determine a concentration ratio for the image, compare the concentration ratio to at least one of the one or more classification thresholds, and classify the image based on the comparison of the concentration ratio to at least one of the one or more classification thresholds, wherein the processor is configured to determine the concentration ratio for the image is determined according to the following:

$$CR = \left(\sum_L P_L \right)^n / \left(\sum_L P_L^n \right)$$

where CR is a concentration ratio, n is greater than 1, and P_L is a population at a level L .

Art Unit: 2624

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24 (Currently Amended) A method of processing an image, the method comprising:

capturing an image of an object;

classifying the image in a class using a concentration ratio;

using the class to modify the operation of an image capturing device; and

applying, using a processor, controlled, equalization to an image generated by the image capture device, where the controlled, histogram equalization uses a concentration ratio that indicates a relative level of smoothness of a distribution of a population of elements in the image, wherein the concentration ratio is determined according to the following:

$$CR = \left(\sum_L P_L \right)^n / \left(\sum_L P_L^n \right)$$

where CR is the concentration ratio, n is greater than 1, and P_L is a population at a level L .

25. (Previously presented) An image processing system comprising:

an image capture device;

an image classifier coupled to the image capture device in a feedback loop; and

a controlled, equalization processor coupled to the image capture device, that uses a concentration ratio that indicates a relative level of smoothness of a distribution of a population of elements in the image, wherein the processor is configured to determine the concentration ratio for the image according to the following:

$$CR = \left(\sum_L P_L \right)^n / \left(\sum_L P_L^n \right)$$

where CR is the concentration ratio, n is greater than 1, and P_L is a population at a level L .

Art Unit: 2624

26. (Previously presented) An image processing system comprising:

an image capture device configured to capture an image; and

an image classifier coupled to the image capture device in a feedback loop, the image classifier configured to determine a concentration ratio for the image that indicates a relative level of smoothness of a distribution of a population of elements in the image, compare the concentration ratio to at least one or more classification thresholds, and classify the image based on the comparison of the concentration ratio to at least one of the one or more classification thresholds, wherein the image classifier is configured to determine the concentration ratio for the image according to the following:

$$CR = \left(\sum_L P_L \right)^n \bigg/ \left(\sum_L P_L^n \right)$$

where CR is the concentration ratio, n is greater than 1, and P_L is a population at a level L .

Allowable Subject Matter

[3] **Claims 11-12, 19, and 24-26** allowed.

Positive Statement

[4] Positive Statement at Final Rejection s. 14, 7/2/2008 withdrawn for correction. Claim 19 citing “[a] computer readable medium having stored thereon instructions executable by an image classifying processor. . .” positively recites the “computer readable medium” to be supported by computer 17 at fig. 2 of Applicant’s disclosure.

Conclusion

[5] Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID P. RASHID whose telephone number is (571)270-1578 and fax number (571)270-2578. The examiner can normally be reached Monday - Friday 7:30 - 17:00 ET.

Art Unit: 2624

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on (571) 272-74155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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